

# **THE INFLUENCE OF EXTRACT FROM THE RIND OF FRUIT PRUNUS DOMESTICA CONTAINING FIBER ("PRUNOFIT") ON THE CHARACTERISTICS OF THE CHOLESTASIS**

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In recent years, the prevalence of diseases of the digestive system in the structure of diseases of the population of Ukraine has increased and is more than 10%. The problem is urgent, above all in the medical and social context, and requires focused research on the pharmaco-correction of the digestive and hepatobiliary systems. One of the most important and most common disorders of the gastrointestinal tract is irritable bowel syndrome, which may be accompanied by functional constipation, which is mainly a consequence of pathological processes in the intestine and liver.

Previous experimental studies have shown that the extract obtained from the rind of the fruits of *Prunus domestica*, containing fiber (conventionally called "Prunofit") has a clear laxative, moderate hepatoprotective, prebiotic and anti-inflammatory properties.

Given the presence of hepatoprotective action of "Prunofit" extract, it was expedient to study its effect on the severity of cholestasis in the conditions of acute toxic hepatitis, since the mechanisms of realization of these effects correlate with each other. One of the key indicators of cholestasis is the activity of cholestatic enzymes, namely alkaline phosphatase (AF), which increases with focal lesions of the liver, accompanied by obstruction of the biliary tract.

The activity of AF was determined using a kinetic method using the test kits of Lachema (Czech Republic). The method is based on the determination of the rate of accumulation of 4-nitrophenol, which is formed by the action of AF from 4-nitrophenylphosphate, due to the removal of phosphate residue.

In the simulation of loperamide-induced constipation with subacute combined alcoholic liver injury in the control pathology group, there was a significant increase in AF (2.6 times) relative to intact control, reflecting destructive processes in the liver tissue and biliary tract.

On the background of the application of "Prunofit" extract at a dose of 200 mg/kg there was a significant decrease in AF activity 1.4 times in relation to the control pathology. It should be noted that the "Prunofit" extract tended to reduce the manifestations of cholestasis more effectively than the drugs of the reference group ("Silibor", 25 mg/kg + "Senadexin", 14 mg/kg), in which there was a significant decrease in the activity of AF 1.06 times.

Therefore, according to the analysis of experimental data, it was proved that "Prunofit" extract at a dose of 200 mg/kg has an inhibitory effect on the destructive effects of liver toxicity, reducing the manifestations of cholestasis syndrome, and does not concede to the effect of the drugs of the reference group.